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a first transparent substrate;
a second transparent substrate disposed opposite to the first transparent substrate;
a liquid crystal layer sandwiched between the first and the second transparent substrates;
a first transparent electrode layer formed on an inner surface of the first transparent substrate;
a first alignment layer formed on the first transparent electrode layer;
a reflecting polarizing film including a laminated combination of a transparent scattering layer composed of a polyester resin and a black layer of an acrylic resin as a light absorbing layer, the reflecting polarizing film being disposed on an outer surface of the first transparent substrate with the black layer formed as an outermost layer of the reflecting polarizing film;
D a second transparent electrode layer formed on an inner surface of the second transparent substrate;
a second alignment layer formed on the second transparent electrode layer;
a phase plate placed on an outer surface of the second transparent substrate; and
a polarizing plate disposed on the phase plate,
wherein the liquid crystal layer has a helical structure twisted through an angle in the range of 240° to 260° in a direction of a thickness of the liquid crystal layer,
a value $\Delta n_1 d_1$ which is a product of Δn_1 and d_1 , where Δn_1 is an index anisotropy of the phase plate and d_1 is a thickness of the phase plate, is in the range of 1000 to 2000 nm,
a value $\Delta n d$ which is a product of Δn and d , where Δn is an index anisotropy of the liquid crystal and d is a thickness of the liquid crystal layer, is in the range of 800 to 1800 nm,

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an absorption axis of the polarizing plate differs from a delay axis of the phase plate by an angle in a range of -40° to -60° in a counterclockwise direction as viewed from an incident light side, the delay axis of the phase plate differs from an alignment direction of the second alignment layer on the second transparent substrate by an angle in a range of -65° to -85° in the counterclockwise direction as viewed in from the incident light side, and an absorption axis of the reflecting polarizing film in the transparent scattering layer differs from an alignment direction of the alignment layer of the first transparent substrate at by angle in a range of -305° to -325° in a clockwise direction as viewed from the incident light side.

wherein the liquid crystal layer has a helical structure twisted through an angle in the range of 240° to 260° in a direction of a thickness of the liquid crystal layer,

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cont.

a value $\Delta n_1 d_1$ which is a product of Δn_1 and d_1 , where Δn_1 is an index anisotropy of the phase plate and d_1 is a thickness of the phase plate, is in the range of 1000 to 2000 nm,

a value $\Delta n d$ which is a product of Δn and d , where Δn is an index anisotropy of the liquid crystal and d is a thickness of the liquid crystal layer, is in the range of 800 to 1800 nm,

an absorption axis of the polarizing plate differs from a delay axis of the phase plate by an angle in a range of -40° to -60° in a counterclockwise direction as viewed from an incident light side, the delay axis of the phase plate differs from an alignment direction of the second alignment layer on the second transparent substrate by an angle in a range of -65° to -85° in the counterclockwise direction as viewed in from the incident light side, and an absorption axis of the reflecting polarizing film in the transparent scattering layer differs from an alignment direction of the alignment layer of the first transparent substrate at by angle in a range of -305° to -325° in a clockwise direction as viewed from the incident light side.

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3. (New) A reflection liquid crystal display according to Claim 1, wherein the helical structure of the liquid crystal layer is twisted through an angle of substantially 240° in the direction of the thickness of the liquid crystal layer, the

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cont. absorption axis of the polarizing plate differs from the delay axis of the phase plate by substantially -50° in a counterclockwise direction as viewed from the incident light side, the delay axis of the phase plate differs from the alignment direction of the second alignment layer by substantially -75° in the counterclockwise direction as viewed in from the incident light side, and the absorption axis of the reflecting polarizing film differs from the alignment direction of the alignment layer of the first transparent substrate at by substantially -315° in a clockwise direction as viewed from the incident light side.

Remarks

Summary

Claims 1 and 2 were pending. Claim 1 has been amended, Claim 2 cancelled and Claim 3 added. No new matter has been added as a result of this amendment.

Rejection of the Claims

In the Office Action dated August 28, 2001, the Examiner rejected Claims 1 and 2 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. Applicant has amended Claim 1 to remove any problems with antecedent basis and submits that amended Claim 1 overcomes the rejection. Applicant has amended Claim 2 (and incorporated it into Claim 1) to recite that the axes of various layers are different from the axes of various other layers by a specific angular range. Applicant submits that it is clear from the specification that the axis of a particular layer is related to effects of the layer on light passing through the layer, not the physical tilt orientation of the layer itself. In addition, the prior art cited by the Examiner (Yamaguchi) also describes angular orientations of the axes of various layers in the liquid crystal display in that patent. Applicant thus submits that amended Claim 1 overcomes the rejection under 35 U.S.C. §112, second paragraph.

The Examiner rejected Claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over Yamaguchi (U.S. patent No. 6,067,136). Applicant has amended